Accident / Incident Report Closed

Unit/Department	Process Area	Site	Report Number
South Operation-Elyria		**ELYRIA**	**0084-SOPS-14-0011**
Report Date	Incident Date	Incident Time	Copied From
01/18/2014	**01/18/2014**	**02:30 PM**	
Incident Location		Team Leader / Supervisor	Reported By
1st floor of building 31		**Terrence M Vanderbosch**	**Brian Beller**
Title of Event (Limit to 90 characters)		Category	Division / Bus. Group / Subgroup Code
Nox evacuation in building 31 due to #1 calciner.		☐ Safety & Health ☐ Environmental	**CC / G-CCP**

Incident Classification

☐ Near Miss	☐ Property Loss	☐ Contractor
☐ Process Safety	☐ Citation / NOV	☐ Contractor Injury / Illness
☐ Injury / Illness	☐ Health Exposure	☐ Contract Injury / Illness
☒ Spill / Release	☐ Inspection	☐ PSM
☐ Permit / Regulatory Deviation	☐ Major Incident	☐ Plant Upset
☐ Fire	☐ Non-Occupational	☐ EHS Management System Failure
☐ Odor Complaint	☐ RMP	☐ Other

Describe Event / What Happened

The feed rate on #1 calciner had been fluctuating in the past day and the operators had been adjusting the syntron accordingly. The feed rate towards the end of 1st shift had dropped really low, so the floor CRT went down and took the syntron apart. He noticed a build up of powder inside the syntron, which he cleaned. When the feed was started back up on the calciner the feed rate was high and caused a larger amount of nox than the scrubber could handle. The CRT went to the syntron and adjusted the syntron to slow the feed rate. It is suspected that some nox was released at the discharge end of the calciner. A nox reading of 6.8 was detected on the 2nd floor by the opening where the pfaudler unloading hopper is. At that point we evacuated the building.

Immediate Corrective Action or Response

Turned off the feed to the calciner and evacuated the building.

Immediate Cause

Excessive material temporarily being fed to the calciner.

Spill Release Type(s)	**Non RQ Spill / Release**

Chemical(s) Involved	CAS #	Phy. State	Air	Land	Water	Contmt	Units
Nitrogen Dioxide (NOx)	10102-44-0	Gas	.66	0	0	0	lbs

Disposition of Material	**The Nox was released to the air.**			
Weather Conditions	Skies:	Temperature:	Wind Direction:	Wind Speed:

Cause Narrative

Calciner had been shutdown for a period of time prior to start-up of the calciner. At the time the calciner was re-started, the Syntron was at the same feed rate as when shut down which produced a flood of material to the calciner causing it to NOx.

Contributing Causes	Root/Primary Causes		
No procedure exists to verify what to check prior to starting up a calciner from shutdown status.	111 - Procedures	112 - Not Used	116 - No Procedure for Task
Experienced operators generally know to check feed rate prior to starting up a calciner.	163 - Training	170 - Training LTA	175 - On-the-Job Training LTA
There was no communication from the previous shift on issues that they were having with the Syntron feeder.	192 - Communications	194 - No Communication or	197 - Communication Between Shifts and Management LTA

	Not Timely

Explanation of Root Causes
111/112/116 - Discussion indicated that a calciner should likely not be started up at a high feed rate from shutdown status and material could flood the calciner. **192194/197 - Maintenance had worked on the Syntron feeder twice during the previous shift due to issues. There was no indication of Syntron rate prior to re-starting the calciner.**

Any known or potential off-site impacts?	**No**	PSM Incident?	**No**	Estimated Cost:	**5,000.00 USD**
Investigation Team	**Robert Gavalek; Robert L Bunnell; Brian Beller; Terrence M Vanderbosch; Justin Quach; Jefferson Lewis; Rory O-Donnell; John Bodmann; John R Crawford; Raymond A Navarro**				

Approved By:	
Manager / Dept. Head	**Leon Zavodnik 01/30/2014 02:26 PM**
EHS Unit Coordinator	**Tim Anglin 02/04/2014 12:35 PM**
Employee	**Terrence M Vanderbosch 02/01/2014 04:45 AM**